STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Resolute FP US, Inc. – Grenada Operations 1000 Papermill Road Grenada, Grenada County, Mississippi

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with Title V of the Federal Clean Air Act (42 U.S.C.A. § 7401 - 7671) and the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder.

Permit Issued: June 1, 2023

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL OUALITY

Expires: May 31, 2028 Permit No.: 0960-00015

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SECTION 1. GENERAL CONDITIONS

1.1 The permittee must comply with all conditions of this permit. Any permit non-compliance constitutes a violation of the Federal Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(6)(a).)

1.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(6)(b).)

1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(6)(c).)

- 1.4 Prior to its expiration, this permit may be reopened in accordance with the provisions listed below.
 - (a) This permit shall be reopened and revised under any of the following circumstances:
 - (1) Additional applicable requirements under the Federal Act become applicable to a major Title V source with a remaining permit term of three (3) or more years. Such a reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended.
 - (2) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - (3) The Permit Board or the EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.
 - (4) The Administrator or the Permit Board determines that the permit must be

revised or revoked to assure compliance with the applicable requirements.

- (b) Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall only affect those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
- (c) Re-openings shall not be initiated before a notice of such intent is provided to the Title V source by the Mississippi Department of Environmental Quality (MDEQ) at least thirty (30) days in advance of the date that the permit is to be reopened, except that the Permit Board may provide a shorter time period in the case of an emergency.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.G.)

1.5 The permittee shall furnish to the MDEQ within a reasonable time any information the MDEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the MDEQ copies of records required to be kept by the permittee or, for information to be confidential, the permittee shall furnish such records to the MDEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(6)(e).)

1.6 This permit does not convey any property rights of any sort, or any exclusive privilege.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(6)(d).)

1.7 The provisions of this permit are severable. If any provision of this permit or the application of any provision of this permit to any circumstances is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(5).)

- 1.8 The permittee shall pay to the MDEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order, which shall be issued in accordance with the procedure outlined in Mississippi Administrative Code, Title 11, Part 2, Chapter 6 "Air Emissions Operating Permit Regulations for Purposes of Title V of the Federal Clean Air Act".
 - (a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the applicant

for calculating actual emissions fails to reasonably represent actual emissions. Actual emissions shall be calculated using emission monitoring data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters, such direct measurement data shall be supplied; published emission factors such as those relating release quantities to throughput or equipment type (e.g. air emission factors); or other approaches such as engineering calculations (e.g. estimating volatilization using published mathematical formulas) or best engineering judgments where such judgments are derived from process and/or emission data which supports the estimates of maximum actual emission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A.(2).)

(b) If the Commission determines that there is not sufficient information available on a facility's emissions, the determination of the fee shall be based upon the permitted allowable emissions until such time as an adequate determination of actual emissions is made. Such determination may be made anytime within one year of the submittal of actual emissions data by the permittee.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A.(2).)

(c) If at any time within the year the Commission determines that the information submitted by the permittee on actual emissions is insufficient or incorrect, the permittee will be notified of the deficiencies and the adjusted fee schedule. Past due fees from the adjusted fee schedule will be paid on the next scheduled quarterly payment time.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D.(2).)

(d) The fee shall be due September 1 of each year. By July 1 of each year, the permittee shall submit an inventory of emissions for the previous year on which the fee is to be assessed. The permittee may elect a quarterly payment method of four (4) equal payments; notification of the election of quarterly payments must be made to the MDEQ by the first payment date of September 1. The permittee shall be liable for penalty as prescribed by State Law for failure to pay the fee or quarterly portion thereof by the date due.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D.)

(e) If in disagreement with the calculation or applicability of the Title V permit fee, the permittee may petition the Commission in writing for a hearing in accordance with State Law. Any disputed portion of the fee for which a hearing has been requested will not incur any penalty or interest from and after the receipt by the Commission of the hearing petition.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.C.)

1.9 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(8).)

1.10 Any document required by this permit to be submitted to the MDEQ shall contain a certification by a responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.2.E.)

- 1.11 The permittee shall allow the MDEQ, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to perform the following:
 - (a) Enter upon the permittee's premises where a Title V source is located, emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - (d) As authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C.(2).)

1.12 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I.(1).)

1.13 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I.(2).)

1.14 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F.(1).)

- 1.15 Nothing in this permit shall alter or affect the following:
 - (a) The provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;
 - (b) The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - (c) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.
 - (d) The ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F.(2).)

1.16 The permittee shall comply with the requirement to register a Risk Management Plan if permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.H.)

1.17 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V Operating Permit (TVOP). If the permittee submits a timely and complete application, the failure to have a TVOP is not a violation of regulations until the Permit Board takes final action on the permit application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit by the deadline specified in writing by the MDEQ any additional information identified as being needed to process the application.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.C.(2)., R. 6.4.B., and R. 6.2.A.(1)(c).)

1.18 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:

- (a) The changes are not modifications under any provision of Title I of the Act;
- (b) The changes do not exceed the emissions allowable under this permit;
- (c) The permittee provides the Administrator and the Department with written notification in advance of the proposed changes [at least seven (7) days, or such other timeframe as provided in other regulations for emergencies] and the notification includes the following:
 - (1) A brief description of the change(s);
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.
- (d) The permit shield shall not apply to any Section 502(b)(10) change.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.F.(1).)

1.19 Should the Executive Director of the MDEQ declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in the absence of an approved schedule, with the appropriate requirements specified in Mississippi Administrative Code, Title 11, Part 2, Chapter 3 – "Regulations for the Prevention of Air Pollution Emergency Episodes" – for the level of emergency declared.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 3.)

1.20 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Mississippi Administrative Code, Title 11, Part 2, Chapter 2 – "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment" – and may require modification of this permit in accordance with Mississippi Administrative Code, Title 11, Part 2, Chapter 6 – "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act".

"Modification" is defined as [a]ny physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:

- (a) Routine maintenance, repair, and replacement;
- (b) Use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
- (c) Use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
- (d) Use of an alternative fuel or raw material by a stationary source which:
 - (1) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51, Subpart I (or 40 CFR 51.166); or
 - (2) The source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I (or 40 CFR 51.166).
- (e) An increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I (or 40 CFR 51.166); or
- (f) Any change in ownership of the stationary source.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.C.(15).)

1.21 Any change in ownership or operational control must be approved by the Permit Board.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.D(4).)

1.22 This permit is a Federally-approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.B.(1).)

1.23 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, silvi-cultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up

operations, and ordnance. Open burning of land-clearing debris must not use starter or auxiliary fuels which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or an Emergency Air Pollution Episode Alert imposed by the Executive Director of the MDEQ and must meet the following buffer zones.

- (a) Open burning without a forced-draft air system must not occur within five hundred (500) yards of an occupied dwelling.
- (b) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within fifty (50) yards of an occupied dwelling.
- (c) Burning must not occur within 500 yards of commercial airport property, private air fields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.G.)

- 1.24 Except as otherwise specified herein, the permittee shall be subject to the following provision with respect to emergencies:
 - (a) Except as otherwise specified herein, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
 - (b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in Part (c) following are met.
 - (c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
 - (1) An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of the emergency the permittee took all reasonable steps to

- minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- (4) The permittee submitted notice of the emergency to the MDEQ within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.G.)

- Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, start-ups, and shutdowns.
 - (a) Upsets (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
 - (1) For an upset, the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through properly signed contemporaneous operating logs or other relevant evidence the following:
 - (i) An upset occurred and that the source can identify the cause(s) of the upset;
 - (ii) The source was at the time being properly operated;
 - (iii) During the upset the source took all reasonable steps to minimize levels of emissions that exceeded the emission standard or other requirement of an applicable rule, regulation, or permit;
 - (iv) That within five (5) working days of the time the upset began, the source submitted a written report to the Department describing the upset, the steps taken to mitigate excess emissions or any other non-compliance, and the corrective actions taken and;
 - (v) That as soon as practicable but no later than twenty-four (24) hours of becoming aware of an upset that caused an immediate adverse impact to human health or the environment beyond the source boundary or

caused a general nuisance to the public, the source provided notification to the Department.

- (2) In any enforcement proceeding by the Commission, the source seeking to establish the occurrence of an upset has the burden of proof.
- (3) This provision is in addition to any upset provision contained in any applicable requirement.
- (4) These upset provisions apply only to enforcement actions by the Commission and are not intended to prohibit EPA or third party enforcement actions.
- (b) Start-ups and Shutdowns (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
 - (1) Start-ups and shutdowns are part of normal source operation. Emission limitations apply during start-ups and shutdowns unless source specific emission limitations or work practice standards for start-ups and shutdowns are defined by an applicable rule, regulation, or permit.
 - (2) Where the source is unable to comply with existing emission limitations established under the State Implementation Plan (SIP) and defined in this Mississippi Administrative Code, Title 11, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for start-ups and shutdowns. Source specific emission limitations or work practice standards established for start-ups and shutdowns are subject to the requirements prescribed in Mississippi Administrative Code, Title 11, Part 2, Chapter 1, Rule 1.10.B.(2)(a) through (e).
 - (3) Where an upset as defined in Rule 1.2 occurs during start-up or shutdown, see the upset requirements above.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)

1.26 The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M, as adopted by reference in Mississippi Administrative Code, Title 11, Part 2, Chapter 1, Rule 1.8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.8.)

- 1.27 Regarding compliance testing (if applicable):
 - (a) The results of any emissions sampling and analysis shall be expressed both in units consistent with the standards set forth in any Applicable Rules and Regulations or this permit and in units of mass per time.

- (b) Compliance testing will be performed at the expense of the permittee.
- (c) Each emission sampling and analysis report shall include (but not be limited to) the following:
 - (1) Detailed description of testing procedures;
 - (2) Sample calculation(s);
 - (3) Results; and
 - (4) Comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.6.B.(3), (4), and (6).)

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description				
AA-000	Facility-Wide [Resolute FP US, Inc. – Grenada Operations]				
AA-001	234.0 MMBTU / Hour Boiler [capable of combusting bark, wood waste, sludge and natural gas; equipped with a multi-clone followed by a wet venturi scrubber; constructed in 1989]				
AA-002	176.5 MMBTU / Hour Natural Gas-Fired Package Boiler [constructed in 1989]				
AA-003	Thermo-Mechanical Pulping System [involves the process of applying heat and mechanical action to wood chips to break down chips to paper pulp]				
AA-004	Paper Machine [involves the process of converting pulp to finished paper]				
AA-005	Woodyard Area [consists of receiving, unloading and processing green wood material (logs, chips and bark); includes debarking, chipping, and slashing activities]				
AA-009	Wastewater Treatment System				
AA-010	Facility Roads [paved and unpaved] (fugitive)				
AA-011	One (1) 15,000-Gallon Turpentine Storage Tank				
AA-020	84.0 MMBTU / Hour Natural Gas-Fired Temporary Rental Boiler No. 1 [operated when Emission Point AA-001 is down]				
AA-021	84.0 MMBTU / Hour Natural Gas-Fired Temporary Rental Boiler No. 2 [operated when Emission Point AA-001 is down]				
AA-022	196 HP (146 kW) Compression Ignition (CI) Emergency Fire Pump Engine [constructed in 1989]				
AA-023	231 HP (172 kW) Compression Ignition (CI) Emergency Fire Pump Engine [constructed in 1989]				
AA-024	221 HP (165 kW) Compression Ignition (CI) Emergency Back-Up Mill Water Pump Engine [constructed in 1989]				

SECTION 3. EMISSION LIMITATIONS & STANDARDS

A. FACILITY-WIDE EMISSION LIMITATIONS & STANDARDS

- 3.A.1 Except as otherwise specified or limited herein, the permittee shall not cause or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process that exceeds forty (40) percent opacity subject to the exceptions provided below:
 - (a) Start-up operations may produce emissions that exceed 40% opacity for up to fifteen (15) minutes per start-up in any one (1) hour and not to exceed three (3) start-ups per stack in any twenty-four (24) hour period.
 - (b) Emissions resulting from soot blowing operations (i.e. ash removal) shall be permitted provided such emissions do not exceed sixty percent (60%) opacity and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one (1) hour.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.A.)

3.A.2 Except as otherwise specified or limited herein, the permittee shall not cause or allow the discharge into the ambient air from any point source any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity equivalent to that provided in Condition 3.A.1. This shall not apply to vision obscuration caused by uncombined water droplets.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.B.)

- 3.A.3 The permittee shall not cause or allow the emission of particles or any contaminants in sufficient amounts or of such duration from any process as to be injurious to humans, animals, plants, or property, or to be a public nuisance, or create a condition of air pollution.
 - (a) The permittee shall not cause or permit the handling, transporting, or storage of any material in a manner, which allows or may allow unnecessary amounts of particulate matter to become airborne.
 - (b) When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance to property other than that from which it originated or to violate any other provision of 11 Miss. Admin. Code Pt. 2, Ch. 1, the Commission may order such corrected in a way that all air and gases or air and gas-borne material leaving the building or equipment are controlled or removed prior to discharge to the open air.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.C.)

B. <u>EMISSION POINT SPECIFIC EMISSION LIMITATIONS & STANDARDS</u>

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard	
	11 Miss. Admin. Code Pt. 2, R. 1.3.F.(1).	3.B.1	PM (filterable)	$E = 4.1 \cdot (p^{0.67})$	
AA-000 (Facility- Wide)	40 CFR Part 63, Subpart S – NESHAP from the Pulp and Paper Industry 40 CFR 63.440(a)(2), and 63.445(a); Subpart S	3.B.2	HAPs	General Applicability	
	40 CFR Part 60, Subpart Db - Standards of Performance for Industrial-Commercial- Institutional Steam Generating Units 40 CFR 60.40b(a); Subpart Db	3.B.3	PM (filterable) NO _X	General Applicability	
AA-001 AA-002	40 CFR Part 63, Subpart DDDDD NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters 40 CFR 63.7485, 63.7490(a)(1), (d), 63.7499(h),(l), and 63.7500(e); Subpart DDDDD	3.B.4	PM (filterable) CO HCl Hg	General Applicability	
	40 CFR Part 64 – Compliance Assurance Monitoring (CAM) 40 CFR 64.2(a); CAM	3.B.5	PM / PM ₁₀ (filterable only)	General Applicability	
	40 CFR Part 61, Subpart E - National Emission Standard for Mercury 40 CFR 61.50; Subpart E	3.B.6	Hg	General Applicability	
AA-001	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permit to	3.B.7		PM / PM ₁₀ (filterable only)	0.10 lb. / MMBTU; 23.4 lb. / hour and 85.8 tpy (Rolling 12-Month Total
	Construct issued March 10, 1987; modified August 8, 1989, January 22, 1991, and May 14, 1991		SO_2	0.094 lb. / MMBTU; 22.0 lb. / hour and 80.6 tpy (Rolling 12-Month Total)	
	(PSD BACT Limits) 11 Miss. Admin. Code Pt. 2, R.		3.B./	NO _X	0.30 lb. / MMBTU; 70.2 lb. / hour and 258.0 tpy (Rolling 12-Month Total)
	2.2.B(10)., as established in the Permit to Construct issued December 23, 1997		СО	0.47 lb. / MMBTU; 110 lb. / hour and 403.8 tpy (Rolling 12-Month Total)	

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as		VOCs	0.10 lb. / MMBTU; 23.4 lb. / hour, and 85.8 tpy (Rolling 12-Month Total)
			As	0.0028 lb. / hour
			Be	0.00009 lb. / hour
	established in the PSD Permit to Construct issued March 10, 1987;		Cd	0.0067 lb. / hr
	modified August 8, 1989, January 22, 1991, and May 14, 1991	3.B.7	Cr(VI)	0.001 lb. / hour
	(PSD BACT Limits)		Cu	0.21 lb. / hour
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Permit to Construct issued		[F] ⁻	0.417 lb. / hour
	December 23, 1997		Pb	0.076 lb. / hour
			Hg	0.017 lb. / hour
			Ni	0.040 lb. / hour
AA-001	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued March 10, 1987 and modified May 14, 1991	3.B.8	HAPs	Combined Emission Rate for Arsenic, Beryllium, Cadmium, Hexavalent Chromium, and Nickel
	(PSD BACT Limit)			
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Permit to Construct issued December 23, 1997			
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued August 8, 1989	3.B.9	Fuel Restriction	No Burning of Sludge Generated at Other Facilities
	(PSD BACT Standard)			
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued March 10, 1987	3.B.10		234.0 MMBTU / hour (or 180,000.0 lb. / hour of Steam Produced) (Rolling 24-Hour Average)
	(PSD BACT Limits)		Heat Input (or Steam Output)	
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Permit to Construct issued December 23, 1997		5 dip di)	

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
	40 CFR 60.43b(c)(1), (f), and (g); Subpart Db		PM (filterable)	0.10 lb. / MMBTU [or 43 ng. / J]
		3.B.11	Opacity	≤ 20% (6-Minute Average) except for one 6-minute period per hour of not more than 27 percent opacity.
	40 CFR 60.44b(d), (h), and (i); Subpart Db	3.B.12	NO_X	0.30 lb. / MMBTU [or 130 ng. / J]
	40 CFR 61.52(b); Subpart E	3.B.13	Hg	7.1 lb. (or 3.2 kg.) / 24-hour Period
			PM (filterable)	0.44 [or 0.00045] lb. / MMBTU of Heat Input; or
			[or TSM]	0.55 [or 0.00057] lb. / MMBTU of Steam Output
	(0.000,000,000,000,000,000,000,000,000,0		CO	3,500 ppmv at 3% O ₂ (3-Run Average); or
AA-001	40 CFR 63.7500(a)(1), and Table 2; Subpart DDDDD	3.B.14	СО	900 ppmv at 3% O ₂ (Rolling 30-Day Average)
			HCl	0.022 lb. / MMBTU of Heat Input; or
				0.025 lb. / MMBTU of Steam Output
			Hg	0.0000057 lb. / MMBTU of Heat Input; or 0.0000064 lb. / MMBTU of Steam Output
	40 CFR 63.7500(a)(2), (7), and Table 4 (Items 1, 7, and 8); Subpart DDDDD	3.B.15	Pressure Drop	
			Liquid Flow Rate Operating Load	Maintain Operating Limits
			Oxygen Content	
	11 Miss. Admin. Code Pt. 2, R. 1.3.D.(2).	3.B.16	PM (filterable)	0.30 gr. / dscf
AA-001 AA-002 AA-020 AA-021	11 Miss. Admin. Code Pt. 2, R. 1.4.A.(1).	3.B.17	SO_2	4.8 lb. / MMBTU
AA-001 AA-020 AA-021	11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the Title V Operating Permit issued October 16, 1998 and modified July 28, 2000	3.B.18	Operational Requirement	Do Not Simultaneously Operate Emission Point AA-001 with Either Emission Point AA-020 or AA-021

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued March 10, 1987 and modified August 8, 1989	3.B.19	Heat Input (or Steam Output)	176.5 MMBTU / hour (or 135,000.0 lb. / hour of Steam Produced) (Rolling 24-Hour Average)
	(PSD BACT Limits)			
	40 CFR 60.44b(a)(1)(ii), (h), and (i); Subpart Db	3.B.20	NO_X	0.20 lb. / MMBTU [or 86 ng. / J]
AA-002	11 Miss. Admin. Code Pt. 2, Ch. 5.		Opacity	 20% (6-Minute Average) except for one 6-minute period per hour of not more than 27 percent opacity.
	and 40 CFR 52.21(j), as established in the PSD Permit to	3.B.21	СО	0.04 lb. /MMBTU and 7.1 lb. / hour
	Construct issued March 10, 1987 and modified August 8, 1989	J.D.21	VOCs	0.0014 lb. / MMBTU and 0.25 lb. / hour
	(PSD BACT Limits)		Hg	0.0023 lb. / hour
AA-002 AA-020 AA-021	11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the Title V Operating Permit issued October 16, 1998 and Modified July 28, 2000	3.B.22	Fuel Restriction	Only Combust Natural Gas
	11 Miss. Admin. Code Pt. 2, R. 1.3.D.(1)(b).	3.B.23	PM (filterable)	$E = 0.8808 \cdot (I^{-0.1667})$
AA-020 AA-021	11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the Title V Operating Permit issued October 16, 1998 and Modified July 28, 2000	3.B.24	Operating Hours	4,642.0 Hours /per Year (Combined for Both Units) (Rolling 12-Month Total)
AA-020 AA-021	11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the Title V Operating Permit issued October 16, 1998 and Modified July 28, 2000	3.B.25	NO _X	39.0 tpy (Combined for Both Units) (Rolling 12-Month Total)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10)., as established in the Title V Operating Permit issued December 21, 2015	3.B.26	Operational Limitation	Remain On-Site No More Than 180 Consecutive Days (Each Unit)

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
AA-020 AA-021	11 Miss. Admin. Code Pt. 2, R. 1.3.D.(1)(a).	3.B.27	PM (filterable)	0.6 lb. / MMBTU
AA-022 AA-023 AA-024	40 CFR Part 63, Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines 40 CFR 63.6585(a), (b), and 63.6590(a)(1)(ii); Subpart ZZZZ	3.B.28	HAPs	General Applicability
	40 CFR 63.6640(f)(1) – (3); Subpart ZZZZ	3.B.29	Operational Requirements	100 Hours / Calendar Year for Maintenance and Readiness Testing; 50 Hours / Calendar Year for Non- Emergency Situations

3.B.1 For Emission Point AA-000 (Facility-Wide), except as otherwise specified herein, the permittee shall not cause or allow the emission of particulate matter (PM) in total quantities in any one (1) hour from any manufacturing process (which includes any associated stacks, vents, outlets, or combination thereof) to exceed the amount determined by the following relationship:

$$E = 4.1 \cdot (p^{0.67})$$

where "E" is the emission rate in pounds per hour and "p" is the process weight input rate in tons per hour. Conveyor discharge of coarse solid matter may be allowed if no nuisance is created beyond the property boundary where the discharge occurs.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.F.(1).)

3.B.2 For Emission Point AA-000 (Facility-Wide), the permittee is subject to and shall comply with the applicable requirements found in 40 CFR Part 63, Subpart S – National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Pulp and Paper Industry. However, there are no applicable requirements under this subpart given that the permittee does not use any chlorine or chlorine dioxide to bleach the pulp from the mechanical pulping process.

(Ref.: 40 CFR 63.440(a)(2) and 63.445(a); Subpart S)

3.B.3 For Emission Points AA-001 and AA-002, the permittee is subject to and shall comply with the applicable requirements found in 40 CFR Part 60, Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units and 40 CFR Part 60, Subpart A – General Provisions.

(Ref.: 40 CFR 60.40b(a); Subpart Db)

3.B.4 For Emission Points AA-001 and AA-002, the permittee is subject to and shall comply with the applicable requirements found in 40 CFR Part 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants (NESHAP) for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters and 40 CFR Part 63, Subpart A – General Provisions (as required in Table 10 of Subpart DDDDD).

Emission Point AA-001 is considered an existing boiler that is in the "hybrid suspension/grate burner designed to burn wet biomass/bio-based solid" fuel subcategory as defined in 40 CFR 63.7575, Subpart DDDDD.

Emission Point AA-002 is considered an existing boiler that is in the "units designed to burn gas 1 fuels" fuel subcategory as defined in 40 CFR 63.7575, Subpart DDDDD. As such, the unit is not subject to any emission limits or operating limits specified in Subpart DDDDD.

(Ref.: 40 CFR 63.7485, 63.7490(a)(1), (d), 63.7499(h), (l), and 63.7500(e); Subpart DDDDD)

3.B.5 For Emission Point AA-001, the permittee is subject to and shall comply with all applicable requirements of 40 CFR Part 64 – Compliance Assurance Monitoring (CAM).

(Ref.: 40 CFR 64.2(a); Compliance Assurance Monitoring)

3.B.6 For Emission Point AA-001, the permittee is subject to and shall comply with the applicable requirements found in 40 CFR Part 61, Subpart E – National Emission Standards for Mercury.

(Ref.: 40 CFR 61.50; Subpart E)

- 3.B.7 For Emission Point AA-001, the permittee shall comply with the following emission limitations:
 - (a) Particulate matter (PM; filterable) and PM less than 10 microns (μm) in diameter (PM₁₀; filterable only): no more than 0.1 pounds (lb.) / MMBTU of heat input, 23.4 lb. / hour, and 85.8 tons per year (tpy) based on a rolling 12-month total;
 - (b) Sulfur dioxide (SO₂): no more than 0.094 lb. / MMBTU of heat input, 22.0 lb. / hour, and 80.6 tpy based on a rolling 12-month total;
 - (c) Nitrogen oxides (NO_X): no more than 0.30 lb. / MMBTU of heat input, not to exceed 70.2 lb. / hour, and 258.0 tpy based on a rolling 12-month total;
 - (d) Carbon monoxide (CO): no more than 0.47 lb. / MMBTU of heat input, 110 lb. / hour, and 403.8 tpy based on a rolling 12-month total;
 - (e) Volatile organic compounds (VOCs): no more than 0.10 lb. / MMBTU of heat input, 23.4 lb. / hour, and 85.8 tpy based on a rolling 12-month total; and

- (f) Arsenic (As): no more than 0.0028 lb. / hour;
- (g) Beryllium (Be): no more than 0.00009 lb. / hour;
- (h) Cadmium (Cd): no more than 0.0067 lb. / hour;
- (i) Chromium (VI) [Cr(VI)]: no more than 0.001 lb. / hour;
- (j) Copper (Cu): no more than 0.21 lb. / hour;
- (k) Fluorides ([F]): no more than 0.417 lb. / hour;
- (1) Lead (Pb): no more than 0.076 lb. / hour;
- (m) Mercury (Hg): no more than 0.017 lb. / hour;
- (n) Nickel (Ni): no more than 0.040 lb. / hour.
- (Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued March 10, 1987 and modified August 8, 1989, January 22, 1991, and May 14, 1991 PSD BACT Limits)
- (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10)., as established in the Permit to Construct issued December 23, 1997)
- 3.B.8 For Emission Point AA-001, the permittee shall limit the combined emission of arsenic (As), beryllium (Be), cadmium (Cd), chromium (VI) [Cr(VI)], and nickel (Ni) in accordance with the following equation:

$$3.58 \overline{M}_{As} + 2.006 \overline{M}_{Be} + 1.505 \overline{M}_{Cd} + 10.031 \overline{M}_{Cr(VI)} + 0.201 \overline{M}_{Ni} < 0.02 \ lb. \frac{lb. metal \ HAPs}{hour}$$

where " $\overline{M}_{(x)}$ " is the pollutant mass emission rate in pounds per hour.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued March 10, 1987 and modified May 14, 1991– PSD BACT Limit)

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10)., as established in the Permit to Construct issued December 23, 1997)

- 3.B.9 For Emission Point AA-001, the permittee shall only combust bark, wood waste, sludge, and natural gas. Additionally, the permittee shall not combust sludge generated at any other facility.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued August 8, 1989 PSD BACT Standard)

- 3.B.10 For Emission Point AA-001, the permittee shall limit the heat input rate to no more than 234.0 MMBTU per hour (or 180,000.0 pounds of steam produced per hour) based on a rolling 24-hour average.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued March 10, 1987 PSD BACT Limits)
 - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Permit to Construct issued December 23, 1997)
- 3.B.11 For Emission Point AA-001, the permittee shall comply with the following limitations at all times except during periods of start-up, shutdown, or malfunction:
 - (a) Particulate matter (PM): no more than 0.10 lb. / MMBTU [or 43 nanograms per joule (ng. / J)] of heat input; and
 - (b) Opacity: no more than 20% (based on a 6-minute average) except for one (1) 6-minute period per hour of no more than 27%.
 - (Ref.: 40 CFR 60.43b(c)(1), (f), and (g); Subpart Db)
- 3.B.12 For Emission Point AA-001, the permittee shall at all times (except during periods of start-up, shutdown, or malfunction) limit the emission of nitrogen oxides (NO_X) to no more than 0.30 lb. / MMBTU [or 130 ng. / J] heat input based on a rolling 30-day average.
 - (Ref.: 40 CFR 60.44b(d), (h), and (i); Subpart Db)
- 3.B.13 For Emission Point AA-001, the permittee shall limit the emission of mercury (Hg) from sludge incineration to no more than 7.1 pounds (or 3.2 kilograms) per 24-hour period.
 - (Ref.: 40 CFR 61.52(b); Subpart E)
- 3.B.14 For Emission Point AA-001, the permittee shall at all times (except during periods of start-up and shutdown) comply with the following limitations:
 - (a) Particulate matter (PM; filterable): no more than 0.44 lb. / MMBTU of heat input or 0.55 lb. / MMBTU of steam output [or total selected metals (TSM): no more than 4.5E-04 lb. / MMBTU of heat input or 5.7E-04 lb. / MMBTU of steam output];
 - (b) Carbon monoxide (CO): no more than 3,500 parts per million by volume (ppmv) on a dry basis corrected to three (3) percent oxygen based on a 3-run average [or no more than 3.5 lb. / MMBTU of steam output];
 - (c) Hydrogen chloride (HCl): no more than 0.022 lb. / MMBTU of heat input [or 0.025 lb. / MMBTU of steam output];
 - (d) Mercury (Hg): no more than 5.7 E-06 lb. / MMBTU of heat input [or 6.4 E-06 lb. / MMBTU of steam output];

(Ref.: 40 CFR 63.7500(a)(1), (f), and Table 2; Subpart DDDDD)

- 3.B.15 For Emission Point AA-001, the permittee shall at all times (except during periods of start-up and shutdown) comply the following operating limits:
 - (a) Maintain the rolling 30-day average scrubber pressure drop at or above the lowest one-hour average pressure drop measured during a performance test that demonstrates compliance with the PM emission limit specified in Condition 3.B.14(a) (and in accordance with to Condition 5.B.10).
 - (b) Maintain the rolling 30-day average scrubber liquid flow rate at or above the lowest one-hour average liquid flow rate measured during a performance test that demonstrates compliance with the PM emission limit specified in Condition 3.B.14(a) (and in accordance with to Condition 5.B.10).
 - (c) Maintain the rolling 30-day average operating load of the boiler such that it does not exceed 110% of the highest hourly average operating load recorded during a performance test conducted to demonstrate compliance with any emission limitation specified in Condition 3.B.14.
 - (d) Maintain the rolling 30-day average oxygen content at or above the lowest hourly average oxygen concentration measured during a performance test that demonstrates compliance with the CO emission limit specified in Condition 3.B.14(b) (and in accordance with Condition 5.B.12).

<u>If a unit is installed with an oxygen trim system</u> – maintain the oxygen content at or above the lowest hourly average oxygen concentration measured during a performance test that demonstrates compliance with the CO emission limit specified in Condition 3.B.14(b).

(Ref.: 40 CFR 63.7500(a)(2), (7), and Table 4 (Items 1, 7, and 8); Subpart DDDDD)

3.B.16 For Emission Points AA-001, the emission of particulate matter (PM) shall not exceed 0.30 grains per dry standard cubic foot (gr. / dscf) while utilizing a mixture of combustibles.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D.(2).)

3.B.17 For Emission Points AA-001, AA-002, AA-020, and AA-021, the maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per MMBTU heat input.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.A.(1).)

3.B.18 For Emission Points AA-001, AA-020, and AA-021, the permittee shall not simultaneously operate Emission Point AA-001 with either Emission Point AA-020 or AA-021.

- (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the Title V Operating Permit issued October 16, 1998 and modified July 28, 2000)
- 3.B.19 For Emission Point AA-002, the permittee shall limit the heat input rate to no more than 176.5 MMBTU per hour (or 135,000.0 pounds of steam produced per hour) based on a rolling 24-hour average.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued March 10, 1987 and modified August 8, 1989 PSD BACT Limits)
- 3.B.20 For Emission Point AA-002, the permittee shall at all times (except during periods of start-up, shutdown, or malfunction) limit the emission of nitrogen oxides (NO_X) to no more than 0.20 lb. / MMBTU [or 86 ng. / J] heat input based on a rolling 30-day average.
 - (Ref.: 40 CFR 60.44b(a)(1)(ii), (h), and (i); Subpart Db)
- 3.B.21 For Emission Point AA-002, the permittee shall comply with the following emission limitations:
 - (a) Opacity: no more than 20% (based on a 6-minute average) except for one (1) 6-minute period per hour of no more than 27%.
 - (b) Carbon monoxide (CO): no more than 0.04 lb. / MMBTU of heat input and 7.1 lb. / hour;
 - (c) Volatile organic compounds (VOCs): no more than 0.0014 lb. / MMBTU of heat input and 0.25 lb. / hour;
 - (d) Mercury (Hg): 0.0023 lb. / hour.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued March 10, 1987 and modified August 8, 1989 PSD BACT Limits)
- 3.B.22 For Emission Points AA-002, AA-020, and AA-021, the permittee shall only combust natural gas.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued March 10, 1987 and modified August 8, 1989 PSD BACT Limit)
 - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the Title V Operating Permit issued October 16, 1998 and Modified July 28, 2000)
- 3.B.23 For Emission Points AA-002, AA-020 and AA-021, emissions of ash and/or particulate matter (PM) from any fossil fuel burning installation of equal to or greater than ten (10) MMBTU per hour heat input but less than 10,000 MMBTU per hour heat input shall not exceed an emission rate as determined by the following relationship:

$$E = 0.8808 \cdot (I^{-0.1667})$$

where "E" is the emission rate in pounds per MMBTU per hour heat input and "I" is the heat input in MMBTU per hour.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D.(1)(b).)

- 3.B.24 For Emission Points AA-020 and AA-021, the permittee shall limit the total combined operation of both boilers to no more than 4,642.0 hours per year based on a rolling 12-month total.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the Title V Operating Permit issued October 16, 1998 and modified July 28, 2000)
- 3.B.25 For Emission Points AA-020 and AA-021, the permittee shall limit the total combined emission of nitrogen oxides (NO_X) from both boilers to no more than 39.0 tpy based on a rolling 12-month total.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the Title V Operating Permit issued October 16, 1998 and modified July 28, 2000)
- 3.B.26 For Emission Points AA-020 and AA-021, the permittee shall ensure that each boiler meets the definition of a "temporary boiler" outlined in 40 CFR 60.41c, Subpart Dc and 40 CFR 63.7575, Subpart DDDDD by ensuring that each boiler is not attached to a foundation and does not remain on-site for more than one hundred eighty (180) consecutive days. Any temporary boiler that replaces a temporary boiler at the site and performs the same or similar function shall be included in calculating the consecutive time period.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10)., as established in the Title V Operating Permit issued December 21, 2015)
- 3.B.27 For Emission Points AA-022, AA-023, and AA-024, the maximum permissible emission of ash and/or particulate matter (PM; filterable) from any fossil fuel burning installation of less than 10 MMBTU per hour heat input shall not exceed 0.6 pounds per MMBTU per hour heat input.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).)
- 3.B.28 For Emission Points AA-022, AA-023, and AA-024, the permittee is subject to and shall comply with the applicable requirements found in 40 CFR Part 63, Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants (NESHAP) from Stationary Reciprocating Internal Combustion Engines (RICE) and 40 CFR Part 63, Subpart A General Provisions (as required in Table 8 of Subpart ZZZZ).

(Ref.: 40 CFR 63.6585(a), (b), and 63.6590(a)(1)(ii); Subpart ZZZZ)

- 3.B.29 For Emission Points AA-022, AA-023 and AA-024, any operation of the engine for any reason other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year is prohibited. If an engine is not operated in accordance with paragraphs (a) through (c) of this condition, the engine will not be considered an emergency engine under the referenced regulation and shall meet all requirements for a corresponding non-emergency engine.
 - (a) There is no time limit on the use of an engine in emergency situations.
 - (b) The permittee may operate an engine for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company accompanied with the engine. Maintenance checks and readiness testing of an engine is limited to a maximum of 100 hours per calendar year. The permittee may petition the MDEQ for approval of additional hours to be used for maintenance checks and readiness testing. However, a petition is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of the engine beyond 100 hours per calendar year.
 - (c) The permittee may operate an engine for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(Ref.: 40 CFR 63.6640(f)(1)-(3); Subpart ZZZZ)

C. INSIGNIFICANT AND TRIVIAL ACTIVITY EMISSION LIMITATIONS & STANDARDS

Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
11 Miss. Admin. Code Pt. 2, R. 1.3.D.(1)(a).	3.C.1	PM	0.6 lb. / MMBTU
11 Miss. Admin. Code Pt. 2, R. 1.4.A.(1).	3.C.2	SO_2	4.8 lb. / MMBTU

3.C.1 The maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than ten (10) MMBTU per hour heat input shall not exceed 0.6 pounds per MMBTU per hour heat input.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D.(1)(a).)

3.C.2 The maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per MMBTU heat input.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.A.(1).)

D. WORK PRACTICE STANDARDS

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
AA-001 AA-002	40 CFR 63.7500(a)(3); Subpart DDDDD	3.D.1	HAPs	General Duty Clause
	40 CFR 63.7515(d), 63.7530(h), 63.7540(a)(10), and Table 3 (Item 3); Subpart DDDDD	3.D.2		Conduct Annual Tune-ups
	40 CFR 63.7530(h) and Table 3 (Items 5, 6); Subpart DDDDD	3.D.3		Startup and Shutdown Requirements
AA-022 AA-023 AA-024	40 CFR 63.6602, 63.6625(i), and Table 2c (Item 1); Subpart ZZZZ	3.D.4	HAPs	Maintenance Requirements
	40 CFR 63.6605(b); Subpart ZZZZ	3.D.5		General Duty Clause
	40 CFR 63.6625(e)(2), and Table 6 (Item 9); Subpart ZZZZ	3.D.6		Perform Best Management Practices

3.D.1 For Emission Points AA-001 and AA-002, the permittee shall at all times operate and maintain the units (including associated air pollution control equipment and monitoring equipment) in a manner consistent with safety and good air pollution control practices for minimizing emissions.

The determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(Ref.: 40 CFR 63.7500(a)(3); Subpart DDDDD)

3.D.2 For Emission Points AA-001 and AA-002, the permittee shall conduct a performance tune-up on each boiler annually and no later than thirteen (13) months after the previously completed tune-up. If a boiler is not operating on the required date for a tune-up, the permittee shall conduct the tune-up within thirty (30) calendar days of start-up.

Each tune-up shall be conducted in accordance with the following provisions:

- (a) Inspect the burner (as applicable) and clean / replace any components of the burner as necessary. The inspection may be performed at any time prior to the tune-up or delayed until the next scheduled boiler shutdown.
- (b) Inspect the flame pattern (as applicable) and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications (if available).

- (c) Inspect the system controlling the air-to-fuel ratio (as applicable) and ensure that it is correctly calibrated and functioning properly. The inspection may be delayed until the next scheduled boiler shutdown.
- (d) Optimize total emissions of carbon monoxide (CO). This optimization should be consistent with the manufacturer's specifications (if available) and with any nitrogen oxide (NO_X) requirement to which a boiler is subject.
- (e) Measure the concentrations in the effluent stream of CO in parts per million by volume (ppmv) and oxygen (O₂) in volume percent (vol.%) before and after the adjustments are made. The measurements may be either on a wet or dry basis as long as the basis remains the same before and after the adjustments are made. The measurements may be taken using a portable CO analyzer.
- (f) The permittee shall maintain on-site the following information collected during a tune-up:
 - (1) The concentration of CO in the effluent stream in ppmv and O₂ in vol.% measured at high fire or the typical operating load before and after the tune-up of a boiler;
 - (2) A description of any corrective action taken as a part of the tune-up of a boiler; and
 - (3) The type and amount of fuel used over the last twelve (12) months prior to tune-up of a boiler but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

(Ref.: 40 CFR 63.7515(d), 63.7530(h), 63.7540(a)(10), (13), and Table 3 (Item 3); Subpart DDDDD)

- 3.D.3 For Emission Points AA-001 and AA-002, the permittee shall operate each boiler in accordance with the following requirements during periods of start-up and shutdown.
 - (a) All continuous monitoring systems (CMS) must be operated during start-up and shutdown.
 - (b) For start-up, the permittee must use one or a combination of the following clean fuels: natural gas, paper, cardboard, clean dry biomass, and any fuels that meet the appropriate hydrogen chloride, mercury, and total suspended matter emission standards by fuel analysis.
 - (c) The permittee shall comply with one (1) of the following work practice standard options:
 - (1) If the permittee chooses to comply using definition (1) of "start-up" found in 40 CFR 63.7575 Subpart DDDDD (once firing a fuel that is not a clean

fuel), the permittee must vent emissions to the main stack(s) and engage all of the applicable control devices. Start-up ends when steam or heat is supplied for any purpose; or

(2) If the permittee chooses to comply using definition (2) of "start-up" found in 40 CFR 63.7575 – Subpart DDDDD (once feeding a fuel that is not a clean fuel), the permittee must vent emissions to the main stack(s) and engage all of the applicable control devices so as to comply with the applicable emission limits within four (4) hours of starting the supply of useful thermal energy.

The permittee must engage and operate particulate matter (PM) control within one (1) hour of first feeding a fuel that is not a clean fuel. The permittee must start all applicable control devices as expeditiously as possible except in any case when necessary to comply with other standards applicable to the boiler by a permit limit or a rule other than Subpart DDDDD that requires operation of the control device(s).

The permittee must develop and implement a written Start-Up and Shutdown Plan in accordance with 40 CFR 63.7505(e), Subpart DDDDD.

- (d) While firing a fuel that is not a clean fuel during shutdown, the permittee must vent emissions to the main stack(s) and operate all applicable control devices. If another fuel must be used to support the shutdown process (in addition to the fuel used prior to the initiation of shutdown), the additional fuel must be natural gas.
- (e) The permittee must comply with applicable emission limits at all times, except for periods of start-up or shutdown that conform with the work practices specified in this condition.
- (f) The permittee must maintain records during periods of start-up and shutdown.

(Ref.: 40 CFR 63.7530(h) and Table 3 (Items 5 and 6); Subpart DDDDD)

- 3.D.4 For Emission Points AA-022, AA-023, and AA-024, the permittee must comply with the following requirements:
 - (a) Change the oil and filter every five hundred (500) hours of operation or annually (whichever comes first).

The permittee also has the option of utilizing an oil analysis program in order to extend the noted oil change requirement in accordance with the following specifications:

(1) The oil analysis shall be performed at the same frequency specified for changing the oil as outlined in paragraph (a) of this condition;

- (2) The analysis program shall (at a minimum) analyze the Total Base Number, viscosity, and percent water content. The condemning limits for each noted parameter are as follows:
 - (i) Total Base Number is less than thirty (30) percent of the Total Base Number of the oil when new;
 - (ii) Viscosity of the oil has changed by more than twenty (20) percent from the viscosity of the oil when new; and
 - (iii) Percent water content (by volume) is greater than 0.5.

If none of the condemning limits are exceeded, the permittee is not required to change the oil. However, if any of the limits are exceeded, the permittee shall change the oil within two (2) business days of receiving the results of the analysis. If the engine is not in operation when the results of the analysis are received, the permittee shall change the oil within two (2) business days or before commencing operation (whichever is later).

The permittee shall maintain records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. Additionally, the analysis program shall be part of the maintenance plan for an engine.

If an engine is operating during an emergency situation and it is not possible to perform the oil change on the required schedule or if performing the oil change on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the oil change can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The oil change should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. The permittee shall report any failure to perform the oil change on the schedule required and the Federal, State, or local law under which the risk was deemed unacceptable.

- (b) Inspect the air cleaner every one thousand (1,000) hours of operation or annually (whichever comes first);
- (c) Inspect all hoses and belts every 500 hours of operation or annually (whichever comes first) and replace as necessary;
- (d) The permittee shall minimize the engine's time spent at idle and minimize the engine's start-up time to a period needed for appropriate and safe loading of an engine, not to exceed thirty (30) minutes, after which time the applicable non-startup emission limitations apply.

(Ref.: 40 CFR 63.6602, 63.6625(i), and Table 2c (Item 1); Subpart ZZZZ)

3.D.5 For Emission Points AA-022, AA-023, and AA-024, the permittee shall at all times operate and maintain an engine (including associated air pollution control equipment and monitoring equipment) in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by Subpart ZZZZ have been achieved.

The determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ, which may include (but is not limited to) monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(Ref.: 40 CFR 63.6605(b); Subpart ZZZZ)

- 3.D.6 For Emission Points AA-022, AA-023, and AA-024, the permittee shall adhere to the following work practices:
 - (a) Operate and maintain an engine and control device (if any) in accordance with manufacturer's emission-related written instructions; or
 - (b) Develop a maintenance plan that must outline the maintenance and operation of an engine in a manner consistent with good air pollution control practice for minimizing emissions.

(Ref.: 40 CFR 63.6625(e)(2), and Table 6 (Item 9); Subpart ZZZZ)

SECTION 4. COMPLIANCE SCHEDULE

- 4.1 Unless otherwise specified herein, the permittee shall be in compliance with all requirements contained herein upon issuance of this permit.
- 4.2 Except as otherwise specified herein, the permittee shall submit to the Permit Board and to the Administrator of EPA Region IV a certification of compliance with permit terms and conditions (including emission limitations, standards, or work practices) by January 31 of each year for the preceding calendar year. If the permit was reissued or modified during the course of the preceding calendar year, the compliance certification shall address each version of the permit. Each compliance certification shall include the following:
 - (a) The identification of each term or condition of the permit that is the basis of the certification:
 - (b) The compliance status;
 - (c) Whether compliance was continuous or intermittent;
 - (d) The method(s) used for determining the compliance status of the source, currently and over the applicable reporting period;
 - (e) Such other facts as may be specified as pertinent in specific conditions elsewhere in this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C.(5)(a), (c), and (d).)

SECTION 5. MONITORING, RECORDKEEPING, & REPORTING REQUIREMENTS

- A. GENERAL MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS
- 5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3).)

- 5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:
 - (a) The date, place as defined in the permit, and time of sampling or measurements;
 - (b) The date(s) analyses were performed;
 - (c) The company or entity that performed the analyses;
 - (d) The analytical techniques or methods used;
 - (e) The results of such analyses; and
 - (f) The operating conditions existing at the time of sampling or measurement.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(b)(1).)

5.A.3 Except where a longer duration is specified in an applicable requirement, the permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(b)(2).)

5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 of each year for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with Mississippi Administrative Code, Title 11, Part 2, Chapter 6, Rule 6.2.E.

For applicable periodic reporting requirements in 40 CFR Parts 60, 61, and 63, the permittee shall comply with the deadlines in this condition for reporting conducted on a semiannual basis. Additionally, any required quarterly reports shall be submitted by the end of the month following each calendar quarter (i.e. April 30, July 31, October 31, and January 31), and any required annual reports shall be submitted by January 31 following each calendar year.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(c)(1).)

(Ref.: 40 CFR 60.19(c), 61.10(g), and 63.10(a)(5); Subpart A)

5.A.5 Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. The report shall be made within five (5) working days of the time the deviation began.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(c)(2).)

5.A.6 Except as otherwise specified herein, the permittee shall perform emissions sampling and analysis in accordance with EPA Test Methods and with any continuous emission monitoring requirements, if applicable. All test methods shall be those versions or their equivalents approved by the MDEQ and the EPA.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3).)

5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3).)

5.A.8 Unless otherwise specified in Section 4, the monitoring, testing, recordkeeping, and reporting requirements of Section 5 herein supersede the requirements of any preceding permit to construct and/or operate upon permit issuance.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3).)

B. <u>SPECIFIC MONITORING AND RECORDKEEPING REQUIREMENTS</u>

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring / Recordkeeping Requirement
		5.B.1	Applicable Pollutants	General Performance Testing Requirements
			PM / PM ₁₀ (filterable only)	Conduct Performance Testing Biennially
			SO_2	
			NO_X	
		5.B.2	СО	
		3.13.2	VOCs	
	11 Miss. Admin. Code Pt. 2, R.		Cu	
	6.3.A.(3)(a)(2).		[F]-	
			Target Metal HAPs	
		5.B.3	PM / PM ₁₀ (filterable only)	Calculate and Record the Emission of Each Pollutant (Monthly and Rolling 12-Month Totals)
			SO_2	
			NO_X	
			CO	
AA-001			VOCs	
AA-001	40 CFR 63.7510(a)(1), (3), (4), 63.7515(a) – (c), and 63.7520(b) – (f), 63.7540(a)(1); Subpart DDDDD	PM (filterable) 5.B.4 [or TSM]	Conduct Performance Testing Annually or Every 3 Years (As Applicable)	
	11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(a)(2).		CO HCl	of Brody's Tours (118 rippineusis)
	40 CFR 63.7505(d) and 63.7520(a); Subpart DDDDD	5.B.5	Hg	Maintain Site-Specific Monitoring and Stack Test Plans
	40 CFR 63.7525(a); Subpart DDDDD	5.B.6	O ₂	Maintain an Analyzer System
	11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(a)(2).			
	40 CFR 63.7525(d) and 63.7535; Subpart DDDDD	5.B.7 Pressure Drop	CMS Requirements	
	40 CFR 63.7525(e) and (f); Subpart DDDDD	5.B.8	Flow Rate	Monitoring System Requirements
	40 CFR 63.7525(a), 63.7530(b)(4)(viii), and Table 7 (Item 4); Subpart DDDDD	5.B.9	O ₂	Establish the Minimum Level Operating Limit

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring / Recordkeeping Requirement
	40 CFR 63.7525(a), 63.7530(b)(4)(iii), and Table 7 (Item 1); Subpart DDDDD	5.B.10	Pressure Drop Liquid Flow Rate	Establish the Minimum Operating Limits for the Scrubber
	40 CFR 63.7540(a)(4) and (6); Subpart DDDDD	5.B.11	HCl Hg	Recalculate the Maximum Cl and Hg Fuel Inputs (If Burning a New Fuel or Mixture of Fuels)
	40 CFR 63.7540(a)(1), (2)(ii), (10), and Table 8 (Items 4, 9, and 10); Subpart DDDDD	5.B.12	Pressure Drop Flow Rate	Recordkeeping Requirements
	40 CFR 63.7555(a)(1) – (2), (b)(1), (3), (5), (c), (d)(1), (3) – (8), and 63.7560(a); Subpart DDDDD	5.B.13	O ₂ Operating Load Fuel Usage	Recordkeeping Requirements
	40 CFR 63.7555(d)(9) – (13); Subpart DDDDD	5.B.14	Start-Up / Shutdown Periods	Recordkeeping Requirements
AA-001	40 CFR 64.3(a), (b), and 64.6(c); CAM	5.B.15	Pressure Drop Liquid Flow Rate	<u>CAM Requirements</u> : Continuously Monitor the Pressure Drop and Liquid Flow Rate
				Conduct Routine Inspections / Calibrations on the Scrubber
	40 CFR 64.7(b) and (c); CAM	5.B.16	Operation & Maintenance	Operation and Maintenance Requirements for Monitoring System(s)
	40 CFR 64.7(d); CAM	5.B.17	Corrective Action	Corrective Action Response to an Excursion / Exceedance of a CAM Indicator
	40 CFR 64.8; CAM	5.B.18	QIP	Upon Request by the MDEQ, Develop a Quality Improvement Plan (QIP)
	40 CFR 64.9(b); CAM	5.B.19	CAM Records	Maintain CAM Records as Specified
	11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(a)(2).	5.B.20	Pressure Drop Flow Rate Liquid Pressure pH	Monitoring System Requirements
AA-001 AA-002	40 CFR 60.49b(d); Subpart Db	5.B.21	Fuel Usage	Monitoring Requirements (As Applicable)
	11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(a)(2).	5.B.22	Steam Production	Monitor Steam Production (Rolling 24- Hour Average)
	40 CFR 60.48b(b)(1), (c) – (f), and (g)(1); Subpart Db	5.B.23	NO _X O ₂ (or CO ₂)	CEMS Operational and Monitoring Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring / Recordkeeping Requirement
AA-001 AA-002	40 CFR 60.49b(g); Subpart Db	5.B.24	NO_X	Recordkeeping Requirements
AA-002	40 CFR 63.7555(a)(1) and (2); Subpart DDDDD	5.B.25	HAPs	Recordkeeping Requirements
AA-020 AA-021	11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(a)(2).	5.B.26	Fuel Usage Hours of Operation	Recordkeeping Requirements
AA-022 AA-023 AA-024	40 CFR 63.6655(a)(1), (2), (4), (5), (d), and (e)(2); Subpart ZZZZ	5.B.27	HAPs	Recordkeeping Requirements
	40 CFR 63.6655(f); Subpart ZZZZ 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.B.28		Record Hours of Operation (Emergency and Non-Emergency)

- 5.B.1 For Emission Point AA-001, unless otherwise specified herein, the permittee shall conduct performance testing in accordance with the following requirements (as applicable):
 - (a) Each test shall be conducted in accordance with an applicable EPA Test Method found in Appendix A of 40 CFR Part 60, Appendix M of 40 CFR Part 51, Appendix A of 40 CFR Part 63, or an alternative test method approved by the EPA prior to the testing event;
 - (b) The permittee shall conduct a minimum of three (3) separate test runs for a performance test for a duration of at least one (1) hour;
 - (c) The permittee shall conduct a performance stack test at representative operating conditions. Operations during periods of start-up, shutdown, or non-operation do not constitute "representative operating conditions". Additionally, the permittee may not conduct performance tests during periods of malfunction.
 - The permittee shall monitor and record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation;
 - (d) The permittee shall conduct a performance stack test at representative load conditions. For the purpose of this permit, "representative load conditions" is defined as the operation of the unit under heat input rates that will be typical in the future;
 - (e) The permittee shall monitor and maintain the fuel usage, steam production rate, scrubber pressure drop, and scrubber liquid flow rate during each test run.

(Ref.: 11 Miss. Admin. Code Pt.2, R.6.3.A.(3)(a)(2).)

5.B.2 For Emission Point AA-001, unless otherwise specified herein, the permittee shall demonstrate compliance with the short-term PM (filterable), PM₁₀ (filterable only), opacity, SO₂, NO_X, CO, VOCs, arsenic (As), beryllium (Be), cadmium (Cd), chromium (VI) [Cr(VI)], copper (Cu), fluorides ([F]), lead (Pb), mercury (Hg), and nickel (Ni) limitations specified in Condition 3.B.7, by conducting performance testing biennially [and no later than twenty-five (25) months after the previously completed test]. The testing shall be done in accordance with Condition 5.B.1.

The permittee may demonstrate compliance with the short-term PM (filterable), PM₁₀ (filterable only), CO and Hg emission limits in accordance with the performance testing schedule outlined in Condition 5.B.4.

(Ref.: 11 Miss. Admin. Code Pt.2, R.6.3.A.(3)(a)(2).)

5.B.3 For Emission Point AA-001, the permittee shall demonstrate compliance with the long-term PM (filterable), PM₁₀ (filterable only), SO₂, NO_X, CO and VOCs limitations specified in Condition 3.B.7, by calculating and recording the emission of each pollutant in tons based on a monthly basis and on a rolling 12-month total basis.

(Ref.: 11 Miss. Admin. Code Pt.2, R.6.3.A.(3)(a)(2).)

- 5.B.4 For Emission Point AA-001, the permittee shall demonstrate compliance with the PM (filterable) [or TSM], CO, hydrogen chloride (HCl), and mercury (Hg) emission limitations specified in Condition 3.B.14 by conducting performance testing on an annual basis [and no later than thirteen (13) months after the previously completed test] in accordance with the following requirements:
 - (a) All performance testing shall be performed in accordance with the requirements specified in 40 CFR 63.7520 and Table 5, Subpart DDDDD and at representative load conditions.
 - (b) If the performance test results for a pollutant specified by Condition 3.B.14 (i.e. PM, CO, HCl, or Hg) are at or below 75% of the corresponding emission limit for at least two (2) consecutive years <u>and</u> there have been no changes to the operation of the boiler or air pollution control equipment that could increase emissions, the permittee may choose to conduct subsequent performance tests for the pollutant once every three (3) years [and no later than thirty-seven (37) months after the previously completed test].

If a performance test results for a specific pollutant indicates that the emissions are in excess of 75% of the corresponding emission limitation, the permittee must resume testing on an annual basis until such time the performance tests over a consecutive two-year period fall at or below 75% of the emission limit.

(c) During each performance test, the permittee shall confirm or reestablish the operating limits specified in Condition 3.B.15 in accordance with Table 7, Subpart

DDDDD and conduct CMS performance evaluations in accordance with 40 CFR 63.7525, Subpart DDDDD.

(d) As applicable, the permittee may utilize any testing conducted in accordance with paragraph (a) to demonstrate compliance with the short-term PM (filterable), PM₁₀ (filterable only), CO, and Hg emission limits specified in Condition 3.B.7 (in lieu of the requirements outlined in Condition 5.B.2).

If the permittee selects this option to demonstrate compliance with a specified limit, the applicable testing frequency required by this condition for the corresponding pollutant shall also apply.

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(Ref.: 40 CFR 63.7510(a)(1), (3), (4), 63.7515(a) – (c), and 63.7520(b) – (f), 63.7540(a)(1); Subpart DDDDD)
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(a)(2).)
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5.B.5 For Emission Point AA-001, the permittee shall maintain a site-specific monitoring plan according to the requirements in 40 CFR 63.7505(d)(1) – (4), Subpart DDDDD for the use of any continuous parameter monitoring system (CPMS).

Additionally, the permittee shall maintain a site-specific stack test plan that includes a test program summary, a test schedule, data quality objectives, and both an internal and external quality assurance program. The data quality objectives are the pretest expectations of precision, accuracy, and completeness of data.

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(Ref.: 40 CFR 63.7505(d) and 63.7520(a); Subpart DDDDD)
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5.B.6 For Emission Point AA-001, the permittee shall calibrate, maintain and operate an *oxygen* analyzer system in accordance with the manufacturer's recommendations. Additionally, the permittee shall maintain documentation that details the manufacturer's recommendations for the system.

For the purpose of this condition, an "oxygen analyzer system" means all equipment required to determine the oxygen content of a gas stream and used to monitor oxygen in the boiler flue gas, boiler, firebox, or other appropriate location (including oxygen trim systems).

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(Ref.: 40 CFR 63.7525(a); Subpart DDDDD)
(Ref.: 11 Miss. Admin. Code Pt.2, R.6.3.A.(3)(a)(2).)
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- 5.B.7 For Emission Point AA-001, the permittee shall operate and maintain each continuous monitoring system (CMS) in accordance with the site-specific monitoring plan required by Condition 5.B.5 and the following procedures:
 - (a) The CMS must complete a minimum of one (1) cycle of operation every fifteen (15) minutes and have a minimum of four (4) successive cycles of operation to have a valid hour of data. Any 15-minute period for which a CMS is out-of-control and

data are not available for a required calculation constitutes a deviation from the monitoring requirements.

Other situations that constitute a monitoring deviation are specified in paragraph (d) of this condition.

(b) The permittee shall operate monitoring systems and collect data at all required intervals at all times that the boiler is operating and compliance is required, except for periods of monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or control activities, including (as applicable) calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in the site-specific monitoring plan.

A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The permittee is required to complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable.

(c) The permittee may not use data recorded during periods of start-up and shutdown, monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in data averages and calculations used to report emissions or operating levels.

The permittee shall record and make available upon request the results of CMS performance audits and the date / duration of periods when the CMS is out-of-control to completion of the corrective actions necessary to return the CMS to operation consistent with the site-specific monitoring plan. The permittee must use all data collected during all other periods in assessing compliance and the operation of the control device and associated control system.

(d) Except during periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities, the failure to collect required data is a deviation of the monitoring requirements.

In calculating monitoring results, the permittee shall not use any data collected during periods of start-up and shutdown, when the monitoring system is out-of-control as specified in the site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out-of-control, or while conducting required monitoring system quality assurance or quality control activities. The permittee must calculate monitoring results using all other monitoring data collected while the boiler is in operation.

- (e) The permittee must determine the rolling 30-day average for each applicable operating limit from all recorded readings, except as allowed in paragraph (c) of this condition.
- (f) The permittee shall record and maintain the results of each inspection, calibration, and/or validation check performed on a CMS.

(Ref.: 40 CFR 63.7525(d) and 63.7535; Subpart DDDDD)

- 5.B.8 For Emission Point AA-001, the permittee shall comply the following requirements for each monitoring system:
 - (a) For a flow monitoring system:
 - (1) Install the flow sensor and other necessary equipment in a position that provides a representative flow;
 - (2) Use a flow sensor with a measurement sensitivity of no greater than two (2) percent of the design flow rate;
 - (3) Minimize the effects of swirling flow or abnormal velocity distributions due to upstream and downstream disturbances (consistent with good engineering practices); and
 - (4) Conduct a flow monitoring system performance evaluation in accordance with the site-specific monitoring plan at the time of each performance test but no less frequently than on an annual basis.
 - (b) For a pressure monitoring system:
 - (1) Install the pressure sensor(s) in a position that provides a representative measurement of the pressure (e.g. PM scrubber pressure drop);
 - (2) Minimize (or eliminate) pulsating pressure, vibration, and internal and external corrosion consistent with good engineering practices;
 - (3) Use a pressure sensor with a minimum tolerance of 1.27 centimeters of water or a minimum tolerance of one (1) percent of the pressure monitoring system operating range (whichever is less);
 - (4) Perform checks at least once each process operating day to ensure pressure measurements are not obstructed (e.g. check for pressure tap pluggage daily);
 - (5) Conduct a performance evaluation of the pressure monitoring system in accordance with the site-specific monitoring plan at the time of each performance test but no less frequently than on an annual basis; and

(6) If at any time the measured pressure exceeds the manufacturer's specified maximum operating pressure range, the permittee shall conduct a performance evaluation of the pressure monitoring system in accordance with the site-specific monitoring plan and confirm that the pressure monitoring system continues to meet the performance requirements in the monitoring plan. Alternatively, the permittee may install and verify the operation of a new pressure sensor.

(Ref.: 40 CFR 63.7525(e) and (f); Subpart DDDDD)

5.B.9 For Emission Point AA-001, the permittee shall demonstrate continuous compliance with the CO emission limit specified in Condition 3.B.14(b) by establishing a minimum oxygen level to be monitored by the oxygen analyzer system.

The minimum oxygen level shall be set at the lower of the minimum values confirmed or reestablished during the applicable performance test runs by collecting oxygen data every fifteen (15) minutes during the entire period of the performance test. The permittee shall determine the hourly average oxygen concentration by computing the hourly averages from all of the 15-minute readings taken during each performance test run and determine the lowest hourly average established during the performance test as the minimum operating limit.

(Ref.: 40 CFR 63.7525(a), 63.7530(b)(4)(viii), and Table 7 (Item 4); Subpart DDDDD)

5.B.10 For Emission Point AA-001, the permittee shall demonstrate continuous compliance with the PM emission limit specified in Condition 3.B.14(a) by establishing minimum scrubber pressure drop and liquid flow rate operating limits.

The minimum scrubber pressure drop and minimum liquid flow rate operating limits shall be set at the higher of the respective minimum values confirmed or reestablished during the applicable performance test runs by collecting scrubber pressure drop and liquid flow rate data every fifteen (15) minutes during the entire period of the performance test. The permittee shall determine the lowest hourly scrubber pressure drop and liquid flow rate by computing the hourly averages from all of the 15-minute readings taken during each performance test.

(Ref.: 40 CFR 63.7525(a), 63.7530(b)(4)(iii), and Table 7 (Item 1); Subpart DDDDD)

5.B.11 For Emission Point AA-001, the permittee shall recalculate the maximum chlorine and mercury inputs by respectively using Equations 7 and 8 found in 40 CFR 63.7530, Subpart DDDDD **if** the permittee plans to burn a new type of fuel or a new mixture of fuels.

If the results of recalculating the maximum chlorine or mercury inputs are greater than the maximum chlorine or mercury input level established during the previous performance test, the permittee shall conduct a new performance test within sixty (60) days of burning the new fuel type or fuel mixture in accordance with the procedures in

40 CFR 63.7520, Subpart DDDDD to demonstrate that the hydrogen chloride or mercury emissions do not exceed the applicable emission limits.

The permittee shall also establish new operating limits based on this performance test in accordance with the procedures in 40 CFR 63.7530(b), Subpart DDDDD. However, the permittee is not required to conduct a fuel analysis for fuel usage described in 40 CFR 63.7510(a)(2)(i) - (iii), Subpart DDDDD.

(Ref.: 40 CFR 63.7540(a)(4) and (6); Subpart DDDDD)

- 5.B.12 For Emission Point AA-001, the permittee shall demonstrate continuous compliance with the applicable emission limits, work practice standards, and operating limits in accordance with the following methods:
 - (a) Collect the scrubber pressure drop and liquid flow rate monitoring system data in accordance with Condition 5.B.7.
 - Reduce the respective data to a rolling 30-day averages and maintain the rolling 30-day averages at or above the applicable operating limits established in accordance with Condition 5.B.10.
 - (b) Continuously monitor the oxygen content using an oxygen analyzer system in accordance with Condition 5.B.6.
 - Reduce the data to a rolling 30-day average and maintain the rolling 30-day average oxygen content at or above the lowest hourly average oxygen level measured during the most recent CO performance test required by Condition 5.B.4.
 - (c) Collect the operating load data (either heat input or steam output) every fifteen (15) minutes.
 - Reduce the data to a rolling 30-day average and maintain the rolling 30-day average operating load such that it does not exceed 110% of the highest hourly average operating load recorded during the most recent performance test required by Condition 5.B.4.
 - (d) After the initial compliance demonstration is completed, operation either above the established maximum operating limit or below the established minimum operating limit (as applicable) is a deviation except during a performance test conducted either to determine compliance with an applicable emission limit or to establish a new operating limit. An operating limit must be confirmed and/or reestablished during a performance test.
 - (e) Maintain records on the type and amount of all fuels burned in the boiler to demonstrate that all fuel types and mixtures of fuels burned would result in equal to or lower fuel input of chlorine, mercury, and total selected metals (TSM) than the maximum values calculated during the last performance test.

- (f) Conduct tune-ups in accordance with Condition 3.D.2.
- (Ref.: 40 CFR 63.7540(a)(1), (2)(ii), (10), and Table 8 (Items 4, 9, and 10); Subpart DDDDD)
- 5.B.13 For Emission Point AA-001, the permittee shall must maintain documentation on the following information:
 - (a) A copy of each notification and report submitted to comply with Subpart DDDDD, (including all documentation supporting an Initial Notification of Compliance Status or a semi-annual compliance report);
 - (b) Records on all performance tests, other compliance demonstrations, and performance evaluations;
 - (c) For each CMS, the permittee shall maintain the following information:
 - (1) Records described in 40 CFR 63.10(b)(2)(vii) (xi), Subpart A;
 - (2) Previous versions of the performance evaluation plan as required by 40 CFR 63.8(d)(3), Subpart A; and; and
 - (3) Records on the date and time each deviation started and stopped.
 - (d) Records required by Condition 5.B.12, including documentation on all monitoring data and calculated averages for applicable operating levels (such as pressure drop, operating load, etc.) to demonstrate continuous compliance with each applicable emission limit and operating limit.
 - (e) The quantity of each fuel type combusted in the boiler on a monthly basis.
 - (f) A copy of all calculations and supporting documentation for the maximum chlorine fuel input, maximum mercury fuel input (as specified in 40 CFR 63.7530, that were done to demonstrate continuous compliance with the applicable emission limit. Supporting documentation should include the basis for the estimates of maximum chlorine, mercury and TSM fuel input.
 - (g) If the permittee chooses to conduct performance testing less frequently than that specified in Condition 5.B.4, the permittee shall maintain records that both demonstrate the results from the previous stack tests were less than 75% of the applicable emission limitation(s) and indicates that there was no change in source operations (including fuel composition and operation of the air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year);
 - (h) Records on the occurrence and duration of each malfunction of either the boiler or the associated air pollution control and monitoring equipment; and

(i) Records on the actions taken during periods of malfunction to minimize emissions in accordance with Condition 3.D.1 to minimize emissions (including corrective actions to restore the malfunctioning boiler, air pollution control or monitoring equipment to its normal use or usual manner of operation);

(Ref.: 40 CFR 63.7555(a)(1) - (2), (b)(1), (3), (5), (c), (d)(1), (3) - (8), and 63.7560(a); Subpart DDDDD)

- 5.B.14 For Emission Point AA-001, the permittee shall maintain the following documentation for periods of start-up and shutdown:
 - (a) Records on the calendar date, time, occurrence, and duration of each event;
 - (b) Records on the type(s) and amount(s) of fuels used during each event;
 - (c) For each start-up period conducted under paragraph (2) of the "start-up" definition found in 40 CFR 63.7575 Subpart DDDDD, the permittee shall maintain of the following information:
 - (1) The time that clean fuel combustion begins;
 - (2) The time when the permittee starts feeding fuels that are not clean fuels;
 - (3) The time when useful thermal energy is first supplied; and
 - (4) The time when the PM controls are engaged.
 - (d) If each start-up period conducted under paragraph (2) of the "start-up" definition, the permittee must maintain documentation on the hourly steam temperature, hourly steam pressure, hourly steam flow, hourly flue gas temperature, and all hourly average CMS data (e.g. scrubber pressure drop, scrubber liquid flow rate, etc.) collected during each start-up period to confirm that the control devices are engaged.
 - Additionally, the permittee shall maintain documentation on the scrubber's liquid flow rate and the pressure drop during each hour of start-up.
 - (e) If the permittee chooses to use paragraph (2) of the "start-up" definition and the permittee is unable to safely engage / operate the PM control(s) within one (1) hour of first firing of non-clean fuels, the permittee may either choose to rely on paragraph (1) of the "start-up" definition or submit a request for a variance with the PM controls requirement to the MDEQ (as described in 40 CFR 63.7555(d)(13), Subpart DDDDD).

(Ref.: 40 CFR 63.7555(d)(9) – (13); Subpart DDDDD)

5.B.15 For Emission Pont AA-001, except for periods when the boiler only combusts natural gas, the permittee shall continuously monitor both the pressure drop across the scrubber

and the scrubbing liquid flow rate. Additionally, the permittee shall conduct routine inspections and/or calibrations on the scrubber in accordance with the CAM Plan found in Appendix B of the permit.

(Ref.: 40 CFR 64.3(a), (b), and 64.6(c); Compliance Assurance Monitoring)

- 5.B.16 For Emission Pont AA-001, except for periods when the boiler only combusts natural gas, the permittee shall comply with the following requirements for the monitoring required by the approved CAM Plan:
 - (a) *Proper Maintenance:* The permittee shall maintain the monitoring, including (but not limited to) maintaining necessary parts for routine repairs of the monitoring equipment at all times.
 - (b) Continued Operation: Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities [including calibration checks and required zero adjustments, and required span adjustments (as applicable)], the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used [including in data averaging and calculations or in fulfilling a minimum data availability requirement (as applicable)].

The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(Ref.: 40 CFR 64.7(b) and (c); Compliance Assurance Monitoring)

5.B.17 For Emission Point AA-001, except for periods when the boiler only combusts natural gas and upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

The response shall include minimizing the period of any start-up, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard (as applicable).

The determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include (but is not limited to) monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(Ref.: 40 CFR 64.7(d); Compliance Assurance Monitoring)

5.B.18 For Emission Point AA-001, except for periods when the boiler only combusts natural gas and based on the results of a determination made under Condition 5.B.17 (in addition to the excursion threshold outlined in each CAM Plan), the MDEQ may require the permittee to develop and implement a Quality Improvement Plan (QIP) that contains the elements specified in 40 CFR 64.8(b).

The QIP shall be developed and implemented within one hundred eighty (180) days of written notification from the MDEQ that a QIP is required. The MDEQ may require the permittee make reasonable changes to the QIP if the QIP fails to address the cause of the control device performance problem or fails to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The implementation of a QIP shall not excuse the permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that applies.

(Ref.: 40 CFR 64.8; Compliance Assurance Monitoring)

5.B.19 For Emission Point AA-001, except for periods when the boiler only combusts natural gas, the permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written QIP required pursuant to Condition 5.B.18 and any activities undertaken to implement a QIP, data used to document the adequacy of monitoring, and monitoring maintenance or corrective actions (as applicable).

As applicable, the records of monitoring data and monitoring performance data should include the date and time, who performed the analysis, analytical techniques or methods used, results and operating conditions at the time of the sampling or measurement. These records may be maintained in hard copy form or electronically, provided they are available for expeditious inspection and review.

(Ref.: 40 CFR 64.9(b); Compliance Assurance Monitoring)

5.B.20 For Emission Point AA-001, the permittee shall install, calibrate, operate, and maintain a monitoring system that continuously measures and records the pressure differential across the scrubber, the scrubbing liquid flow rate, the scrubbing liquid pressure, and pH of the scrubbing liquid.

The permittee shall recalibrate the device(s) for each system on a semi-annual basis in accordance with the manufacturer's instructions and the following specifications:

- (a) The pressure monitoring device(s) must be certified by the manufacturer to be accurate within ± 1 inch of water column gauge pressure.
- (b) The liquid flow rate monitoring device must be certified by the manufacturer to be accurate within ±5 percent of design scrubbing liquid flow rate.
- (c) The pH monitoring device(s) must be certified by the manufacturer to be accurate within ±0.1 pH.

The permittee shall maintain the results from each calibration and documentation that demonstrates each device is certified to the applicable specifications.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(a)(2).)
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- 5.B.21 For Emission Points AA-001 and AA-002, the permittee shall monitor and record the fuel usage for each boiler in accordance to the following requirements:
 - (a) <u>For Emission Point AA-001</u>: The permittee shall monitor the amount of each fuel combusted on a daily basis and calculate the annual capacity factor on a rolling 12-month average basis at the end of each calendar month for natural gas and wood individually.
 - (b) <u>For Emission Point AA-002</u>: The permittee shall monitor the amount of each fuel combusted during each calendar month.

(Ref.: 40 CFR 60.49b(d); Subpart Db)

- 5.B.22 For Emission Points AA-001 and AA-002, the permittee shall demonstrate compliance with the limits specified in Conditions 3.B.10 and 3.B.19 by using one of the following methods for each boiler:
 - (a) Monitor and maintain the hourly steam production rate based on a rolling 24-hour average; or
 - (b) Calculate and maintain the hourly heat input rate (via fuel usage monitoring data) based on a rolling 24-hour average.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(a)(2).)

- 5.B.23 For Emission Points AA-001 and AA-002, the permittee shall calibrate, maintain, and operate a continuous emission monitoring system (CEMS) for measuring nitrogen oxides (NO_X) and oxygen (O₂) [or carbon dioxide (CO₂)] as well as recording the output of the system. Additionally, the permittee must meet the following requirements for the CEMS:
 - (a) The CEMS shall operate and record data during all periods of operation of the boiler except for CEMS breakdowns and repairs. The CEMS shall record data calibration checks, and zero / span adjustments.

- (b) The 1-hour average NO_X emission rates shall be expressed in lb. / MMBTU [or ng. / J] heat input and shall be used to calculate the rolling 30-day average emission rate. Additionally, the 1-hour averages shall be calculated using the data points required by 40 CFR 60.13(h)(2), Subpart A.
- (c) The procedures specified in 40 CFR 60.13, Subpart A shall be followed for the installation, evaluation, and operation of the continuous monitoring systems. Additionally, the permittee shall conduct a CEMS performance evaluation during each required performance test in accordance with 40 CFR 60.13(c), Subpart A.
- (d) When NO_X emissions data are not obtained due to a CEMS breakdown, repair, calibration check, and zero / span adjustment, the emissions data must be obtained by using one (1) of the following methods to provide emissions data for a minimum of 75% of the operating hours in the boiler's operating day (in at least twenty-two (22) out of thirty (30) successive unit operating days):
 - (1) A stand-by monitoring system,
 - (2) EPA Test Methods 7 and 7A (found in Appendix A of 40 CFR Part 60); or
 - (3) Other approved reference methods.

(Ref.: 40 CFR 60.48b(b)(1), (c) – (f), and (g)(1); Subpart Db)

- 5.B.24 For Emission Points AA-001 and AA-002, the permittee shall maintain the following information on each operating day of each boiler:
 - (a) The calendar date;
 - (b) The average hourly NO_X emission rates (expressed as NO₂) in lb. / MMBTU (or ng. / J) heat input either measured or predicted;
 - (c) The 30-day average NO_X emission rates in lb. / MMBTU (or ng. / J) heat input calculated at the end of each operating day from the measured or predicted hourly NO_X emission rates for the preceding thirty (30) unit operating days;
 - (d) The identification of operating days when the calculated 30-day average NO_X emission rates are in excess of the emission limit specified in Condition 3.B.12 or 3.B.20 as well as with the reason(s) for such excess emissions and a description of corrective actions taken;
 - (e) The identification of operating days for which pollutant data have not been obtained, including the reason(s) for not obtaining sufficient data as well as a description of corrective actions taken;
 - (f) The identification of the times when emissions data have been excluded from the calculation of the average emission rates and the reasons for excluding the data;

- (g) The identification of the "F" factor used for calculations, the method of determination, and the type(s) of fuel combusted;
- (h) The identification of times when the pollutant concentration exceeds the full span of the CEMS;
- (i) A description of any modifications made to the CEMS that could affect the ability of the CEMS to comply with either Performance Specification 2 or 3 (found in Appendix B of 40 CFR Part 60); and
- (j) The results from the daily CEMS drift tests and the quarterly assessments as required by Procedure 1 found in Appendix F of 40 CFR Part 60.

(Ref.: 40 CFR 60.49b(g); Subpart Db)

- 5.B.25 For Emission Point AA-002, the permittee shall maintain the following documentation:
 - (a) A copy of each notification and report submitted to comply with Subpart DDDDD (including all documentation supporting an Initial Notification of Compliance Status or a submitted semi-annual compliance report);
 - (b) Records on all compliance demonstrations and performance evaluations.

(Ref.: 40 CFR 63.7555(a)(1) and (2); Subpart DDDDD)

- 5.B.26 For Emission Points AA-020 and AA-021, the permittee shall maintain the following information on each boiler (as applicable):
 - (a) The dates in which a boiler is brought on-site, placed in operation, removed from operation, and removed from the site;
 - (b) The amount of fuel combusted during each calendar month.
 - (c) The hours of operation during each calendar month.
 - (d) Records from the vendor that each rental boiler is guaranteed to meet a NO_X emission rate of 0.10 lb. / MMBTU or lower; and
 - (e) The total combined hours of operation for both boilers calculated on a rolling 12-month period.

(Ref.: 11 Miss. Admin. Code Pt.2, R.6.3.A.(3)(a)(2).)

- 5.B.27 For Emission Points AA-022, AA-023, and AA-024, the permittee shall maintain documentation that contains the following information:
 - (a) All notifications submitted to comply with Subpart ZZZZ;

- (b) Records on the occurrence and duration of each malfunction of an engine or monitoring equipment;
- (c) Records on all required maintenance performed on the monitoring equipment;
- (d) Records on the actions taken during periods of malfunction to minimize emissions, including corrective actions taken to restore equipment to its normal and usual manner of operation; and
- (e) Records required in Condition 3.D.6 to show continuous compliance with the applicable emission or operating limit.
- (f) Records on all maintenance done on an engine in order to demonstrate that the engine was operated and maintained in accordance with the maintenance plan specified in Condition 3.D.4.

(Ref.: 40 CFR 63.6655(a)(1), (2), (4), (5), (d), and (e)(2); Subpart ZZZZ)

5.B.28 For Emission Points AA-022, AA-023, and AA-024, the permittee shall monitor and record (via a non-resettable hour meter) the hours of operation for each engine on a monthly basis for both emergency and non-emergency service. Additionally, the permittee shall detail (in writing) and maintain what classified each occurrence as either an emergency or a non-emergency.

(Ref.: 40 CFR 63.6655(f); Subpart ZZZZ)

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)

C. SPECIFIC REPORTING REQUIREMENTS

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Reporting Requirement
AA-000 (Facility- Wide)	11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(c)(1).	5.C.1	PM / PM ₁₀ (filterable only)	Submit a Semi-Annual Monitoring Report
AA-001	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.C.2	SO_2 NO_X CO $VOCs$ Cu $[F]^-$ Target Metal HAPs	Stack Test Reporting Requirements
	40 CFR 64.9(a); CAM	5.C.3	CAM Reporting	Semi-Annual Reporting Requirements
	40 CFR 64.7(e); CAM	5.C.4	CAM Modification	Promptly Notify the MDEQ of Failure to Achieve Limit / Standard Though No Excursion or Exceedance was Indicated By Approved Monitoring.
AA-001 AA-002	40 CFR 60.49b(i); Subpart Db	5.C.5	PM NO _X	Semi-Annual Reporting Requirements
	40 CFR 60.49b(h)(2) and (w); Subpart Db	5.C.6		Excess Emissions Reporting Requirements
	40 CFR 63.7550(a), (b)(3), (4), (c)(1), (3), (4), (e); Subpart DDDDD	5.C.7	PM (filterable) [or TSM]	Submit a Semi-Annual Compliance Report
	40 CFR 63.7550(h); Subpart DDDDD	5.C.8	HCl Hg	CEDRI Reporting Requirements

- 5.C.1 For Emission Point AA-000 (Facility-Wide), the permittee shall submit a certified semi-annual monitoring report (SMR) in accordance with Condition 5.A.4 that contains the following information:
 - (a) <u>For Emission Point AA-001</u> the total emission of PM (filterable), PM₁₀ (filterable only), SO₂, NO_X, CO, and VOCs on both a monthly and rolling 12-month total basis.
 - (b) <u>For Emission Points AA-001 and AA-002</u> the permittee shall include the following information for each boiler (as applicable):
 - (1) The amount of each fuel combusted on either a daily or monthly basis;

- (2) The annual capacity factor for each fuel calculated on a monthly basis; and
- (3) The maximum 24-hr average steam production rate for each calendar day in the reporting period.
- (c) <u>For Emission Points AA-020 and AA-021</u> a summary of the information specified in Condition 5.B.26. If no temporary boilers are on-site during the reporting period, the SMR shall include a negative declaration indicating as such.
- (d) <u>For Emission Points AA-022, AA-023 and AA-024</u> the permittee shall include the following information:
 - (1) The hours of operation for each engine on a monthly basis;
 - (2) The hours spent for emergency operation and what classified the operation as an emergency; and
 - (3) The hours spent for non-emergency operation and the reason for the non-emergency operation.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(c)(1).)

- 5.C.2 For Emission Point AA-001, the permittee shall submit the following notifications, information, and/or reports for any performance test required by Conditions 5.B.2 and 5.B.4 in accordance with specified deadline(s):
 - (a) A written test protocol shall be submitted at least thirty (30) days prior to the intended test date(s) to ensure that all test methods and procedures are acceptable to the MDEQ. If deemed necessary by the MDEQ, a conference may be required prior to the intended testing date to discuss the proposed test methods and procedures outlined in the performance testing protocol.
 - (b) After the first successful submittal of a written test protocol, the permittee may request that the submittal of a testing protocol be waived for subsequent testing by certifying in writing at least thirty (30) days prior to the subsequent testing that all conditions for testing remain unchanged such that the original protocol can and will be followed.
 - (c) A notification about the testing event shall be submitted ten (10) days prior to the scheduled date(s) so that an observer may be afforded the opportunity to witness the test(s).
 - (d) The results from a performance test shall be submitted to the MDEQ no later than sixty (60) days after the completion of the actual test. Additionally, the permittee shall submit a summary of the results for any required periodic and/or parametric monitoring during a performance testing as well as the results from any CMS performance evaluation.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)

- 5.C.3 For Emission Point AA-001, the permittee shall a submit semiannual monitoring report (SMR) in accordance with Condition 5.A.4 with the following information (as applicable):
 - (a) Summarized information on the number, duration, and cause (including an unknown cause, if applicable) of excursions or exceedances (as applicable) and the corrective actions taken;
 - (b) Summarized information on the number, duration, and cause (including an unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks (if applicable);
 - (c) A description of the actions taken to implement a QIP during the reporting period as specified in Condition 5.B.18. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances.

(Ref.: 40 CFR 64.9(a); Compliance Assurance Monitoring)

5.C.4 For Emission Point AA-001, if the permittee identifies a failure to achieve compliance with the emission limitation or standard for which the approved CAM monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and (if necessary) submit a proposed modification to the permit to address the necessary monitoring changes.

Such a modification may include (but is not limited to) reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or monitoring additional parameters.

(Ref.: 40 CFR 64.7(e); Compliance Assurance Monitoring)

5.C.5 For Emission Points AA-001 and AA-002, the permittee shall a submit semiannual monitoring report (SMR) in accordance with Condition 5.A.4 that contains the information specified in Condition 5.B.24.

(Ref.: 40 CFR 60.49b(i); Subpart Db)

5.C.6 For Emission Points AA-001 and AA-002, the permittee shall submit an excess emission report in accordance with Condition 5.A.4 that details any excess emissions (as defined in Condition 5.B.24) that occur during the reporting period.

(Ref.: 40 CFR 60.49b(h)(2) and (w); Subpart Db)

5.C.7 For Emission Points AA-001 and AA-002, the permittee shall submit a semi-annual compliance report in accordance with Condition 5.A.4 that contains the following information (as applicable):

(a) For Emission Points AA-001 and AA-002:

- (1) The company (and facility name, if applicable) and the address;
- (2) Information on the process unit, applicable emission limitations, and applicable operating parameter limitations; and
- (3) The date of the most recent tune-up (including the date of the most recent burner inspection if it was not completed on an annual basis and was delayed until the next scheduled or unscheduled unit shutdown);

(b) For Emission Point AA-001:

- (1) For each CMS the monitoring equipment manufacturer(s), the model number(s), and the date of the last CMS certification or audit;
- (2) The total fuel use by the boiler including (but not limited to) a description of the fuel, whether the fuel has received a non-waste determination by the EPA or the permittee's basis for concluding the fuel is not a waste, and the total fuel usage amount with units of measure;
- (3) If the permittee is conducting a performance test once every three (3) years [as allowed in Condition 5.B.4(b)], report the date of the last two (2) performance tests and a statement as to whether there have been any operational changes since the last performance test that could increase emissions;
- (4) A statement indicating no new types of fuel were burned in the boiler. If a new type of fuel was burned, the permittee shall submit the required HCl), Hg, and TSM information in accordance with 40 CFR 63.7550(c)(5)(viii), Subpart DDDDD;
- (5) If the permittee intends to burn a new type of fuel that is non-compliant with the maximum chlorine, mercury, or TSM input operating limits, the permittee shall include a statement indicating the intent to conduct a new performance test no later than sixty (60) days after starting to burn the new fuel;
- (6) If there are no deviations from applicable emission limitations or operating limitations, include a statement that there were no deviations from the emission or operating limitations during the reporting period;

- (7) If there were no deviations from monitoring requirements (including no periods during which a CMS was out of control), include a statement that there were no deviations and no periods during which the monitoring system was out of control during the reporting period;
- (8) If a malfunction occurred during the reporting period, the report shall include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused / may have caused any applicable emission limitation to be exceeded

The report must also include a description of any action(s) taken during a malfunction of the boiler, the associated air pollution control device, or the CMS to minimize emissions (including actions taken to correct the malfunction);

- (9) For each instance of start-up or shutdown, include the information required to be monitored, collected, or recorded as specified in Condition 5.B.14;
- (10) If there is a deviation from a work practice standard for periods of start-up and shutdown, the compliance report shall also contain the following information:
 - (i) A description of the deviation and from which work practice standard was deviated;
 - (ii) Information on the number, duration, and cause of deviations (including any unknown cause, as applicable), and the corrective action taken; and
 - (iii) If the deviation occurred during an annual performance test, provide the date the annual performance test was completed
- (11) If there is a deviation from an emission limit, an operating limit, or a monitoring requirement, the compliance report shall also contain the following information:
 - (i) The date and time each deviation started and stopped and description of the nature of the deviation;
 - (ii) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks;
 - (iii) The date, time, and duration that each CMS was out of control (including the information specified n 40 CFR 63.8(c)(8), Subpart A);

- (iv) A summary of the total duration of the deviation during a reporting period and the total duration as a percent of the total source operating time during that reporting period;
- (v) A characterization of the total duration of the deviations during a reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes;
- (vi) A summary of the total downtime duration for the CMS during a reporting period and the total duration of the CMS downtime as a percent of the total source operating time during that reporting period;
- (vii) A brief description of the source for which there was a deviation; and
- (viii) A description of any changes in the CMS, the processes, or controls since the last reporting period for the source for which there was a deviation.

(Ref.: 40 CFR 63.7550(a), (b)(3) - (4), (c)(1), (3) - (5)(i) - (ix), (xi) - (xiv), (xvii), (xviii), (d), and (e); Subpart DDDDD)

5.C.8 For Emission Points AA-001 and AA-002, the permittee shall submit any performance test report or any semi-annual compliance report required by Subpart DDDDD to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) website [https://cdx.epa.gov/]. Each electronic submittal shall be completed in accordance with 40 CFR 63.7550(h)(1) – (3), Subpart DDDDD.

(Ref.: 40 CFR 63.7550(h); Subpart DDDDD)

SECTION 6. ALTERNATIVE OPERATING SCENARIOS

None permitted.

SECTION 7. TITLE VI REQUIREMENTS

The following are applicable or potentially applicable requirements originating from Title VI of the Clean Air Act – Stratospheric Ozone Protection. The full text of the referenced regulations may be found on-line at http://www.ecfr.gov/ under Title 40, or DEQ shall provide a copy upon request from the permittee

- 7.1 If the permittee produces, transforms, destroys, imports or exports a controlled substance or imports or exports a controlled product, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart A Production and Consumption Controls.
- 7.2 If the permittee performs service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart B Servicing of Motor Vehicle Air Conditioners.
- 7.3 The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart E The Labeling of Products Using Ozone-Depleting Substances, for the following containers and products:
 - (a) All containers in which a class I or class II substance is stored or transported;
 - (b) All products containing a class I substance; and
 - (c) All products directly manufactured with a process that uses a class I substance, unless otherwise exempted by this subpart or, unless EPA determines for a particular product that there are no substitute products or manufacturing processes for such product that do not rely on the use of a class I substance, that reduce overall risk to human health and the environment, and that are currently or potentially available. If the EPA makes such a determination for a particular product, then the requirements of this subpart are effective for such product no later than January 1, 2015.
- 7.4 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart F Recycling and Emissions Reduction:
 - (a) Servicing, maintaining, or repairing appliances;
 - (b) Disposing of appliances, including small appliances and motor vehicle air conditioners; or
 - (c) Refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, as

well as persons selling, offering for sale, and/or purchasing class I, class II, or non-exempt substitute refrigerants.

- 7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any acceptable alternative that is listed in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR Part 82, Subpart G Significant New Alternatives Policy Program. The permittee shall also comply with any use conditions for the acceptable alternative substance.
- 7.6 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart H Halon Emissions Reduction:
 - (a) Any person testing, servicing, maintaining, repairing, or disposing of equipment that contains halons or using such equipment during technician training;
 - (b) Any person disposing of halons;
 - (c) Manufacturers of halon blends; or
 - (d) Organizations that employ technicians who service halon-containing equipment.

APPENDIX A

List of Abbreviations Used In this Permit

BACT Best Available Control Technology
CEM Continuous Emission Monitor

CEMS Continuous Emission Monitoring System

CFR Code of Federal Regulations

CO Carbon Monoxide

COM Continuous Opacity Monitor

COMS Continuous Opacity Monitoring System

DEQ Mississippi Department of Environmental Quality
EPA United States Environmental Protection Agency

gr/dscf Grains Per Dry Standard Cubic Foot

HP Horsepower

HAP Hazardous Air Pollutant

lb/hr Pounds per Hour

lb/MMBTU Pounds per Million BTU

M or K Thousand

MACT Maximum Achievable Control Technology

MM Million

MMBTUH Million British Thermal Units per Hour

NA Not Applicable

NAAQS National Ambient Air Quality Standards

NESHAP National Emissions Standards for Hazardous Air Pollutants, 40

CFR Part 61, or National Emission Standards for Hazardous Air

Pollutants for Source Categories, 40 CFR Part 63

ng/J Nanograms per Joule

NMVOC Non-Methane Volatile Organic Compounds

NO_x Nitrogen Oxides

NSPS New Source Performance Standards, 40 CFR 60

O&M Operation and Maintenance

PM Particulate Matter

PM $_{10}$ Particulate Matter less than 10 μ m in diameter PM $_{2.5}$ Particulate Matter less than 2.5 μ m in diameter

ppm Parts per Million

PSD Prevention of Significant Deterioration

SIP State Implementation Plan

SO₂ Sulfur Dioxide

SSM Startup, Shutdown, and Malfunction

tpy Tons per Year

TRS Total Reduced Sulfur

VEE Visible Emissions Evaluation
VHAP Volatile Hazardous Air Pollutant

VOHAP Volatile Organic Hazardous Air Pollutant

VOC Volatile Organic Compound

APPENDIX B

CAM PLAN FOR EMISSION POINT AA-001

	Indicator No. 1	Indicator No. 2
Indicator	Scrubber Pressure Drop	Scrubbing Liquid Flow Rate
Measurement Approach	Pressure drop is the specified performance metric for wet scrubbers controlling PM emissions in 40 CFR Part 63, Subpart DDDDD	Liquid flow rate is the specified performance metric for wet scrubbers controlling PM emissions in 40 CFR Part 63, Subpart DDDDD
Monitoring Method and Location	The pressure taps for measuring pressure drop are located just prior to the scrubber inlet and between the outlet of the scrubber and the blower.	The scrubber liquid flow is measured using a flow meter on the line feeding the Venturi throat.
	Range is confirmed or re-established during a performance test	Range is confirmed or re-established during a performance test
Indicator Range (including the corrective action taken for an excursion)	An excursion is defined as any 30-day average outside the indicator range. Corrective actions are initiated by maintenance when a monitoring malfunction is indicated.	An excursion is defined as any 30-day average outside the indicator range. Corrective actions are initiated by maintenance when a monitoring malfunction is indicated.
excursion)	The corrective actions are appropriate for the malfunction being addressed, and may include but are not limited to cleaning, repairing, replacing, or recalibrating the malfunctioning instrumentation.	The corrective actions are appropriate for the malfunction being addressed, and may include but are not limited to cleaning, repairing, replacing, or recalibrating the malfunctioning instrumentation.
Monitoring Frequency	Continuous measurements of at least one reading every 15-minutes during source operation, reduced to 30-day rolling averages	Continuous measurements of at least one reading every 15-minutes during source operation, reduced to 30-day rolling averages
Data Collection / Recordkeeping Procedures	The facility DCS automatically collects and records scrubber differential pressure (pressure drop) once every minute. The DCS then averages the one-minute readings every 15-minutes and builds 1-hour averages. The one-hour block averages are then averaged over the 30-day averaging period	The facility DCS automatically collects and records and scrubber liquid flow once every minute. The DCS then averages the one-minute readings every 15-minutes and builds 1-hour averages. The one-hour block averages are then averaged over the 30-day averaging period
Averaging Period	30-day rolling average	30-day rolling average
QA / QC Practices	Annual calibration / performance evaluation	Annual calibration / performance evaluation